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10/587,923	09/06/2007	Wilhelm Landwehr	SSM-566US	3606
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RATNERPRESTIA			EXAMINER	
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VALLEY FORGE, PA 19482				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/587,923

Applicant(s)

LANDWEHR, WILHELM

Examiner

JOSHUA T. KENNEDY

Art Unit

3679

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) 11, 15-31 and 41-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-14, 32-40, 53 and 54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 August 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Species I in the reply filed on 6/8/2009 is acknowledged. The traversal is on the ground(s) that "the claims relate to a single inventive concept" (Page 11) and that neither cited patents "disclose the...feature which relates to the single general inventive concept" (Page 10). This is not found persuasive because upon further review of the species, Examiner found that the embodiment of Group IV, Figures 6 and 7, does not show a positioning element therefore claims 4, 5, 34-36, 53 and 54 are not common to all claims. Further, as advanced in the rejection below, the claims common to all species (Claims 1-3, 6-10, 12-14, 33 and 37-40) are known, the special technical feature does not define a contribution over the prior art.

The requirement is still deemed proper and is therefore made FINAL.
Examiner also notes that Claim 41 depends from Claim 11 and thus has been withdrawn.

Claims 11, 15-31 and 41-53 have been withdrawn.

Claims 1-10, 12-14, 32-40, 53 and 54 have been examined.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Objections

Claims 6 and 14 have been objected to because of the following informalities:

Claim 6, Lines 6, 7, 9 and 10: "-" should be replaced by ",".

Claim 14, Line 5: "." should be deleted.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10, 12-14, 32-40, 53 and 54 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Further, it is unclear whether claims 1 and 6 are drawn to the combination or subcombination. In particular, the preamble of each of the claims 1 and 21 imply the subcombination of the shrinkage disc unit and the tool, respectively. However, the body of each of the claims positively includes the tool and shrinkage disc unit, respectively. In light of this, and because of the clear formatting of the claims wherein claims 1-5 are directed towards the disc unit, claim 6 being directed towards a tool, and claims 7 and 8 being directed towards the combination, for this Office action only, it will be considered that these claims are drawn to the subcombination. Therefore, since Claims 34-36, 53 and 54 are drawn towards structural limitations of the tool, yet are dependent upon claims solely drawn to the disc unit, no art rejection can be applied at this time for claims 34-36, 53 and 54 because any such rejection would require undue speculation regarding the scope and content of the claims.

Claim 33 recites the limitation "the tensioning sleeve" in Lines 2 and 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 34 recites the limitation "the axial forces" in Line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-10, 12-14, 33 and 37-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Miller et al (US Patent 4,979,842).

As to Claim 1, as best understood MILLER ET AL disclose a shrinkage disc unit, comprising:

- a) a rotational body (2) comprising a circumferential outer surface (Fig 1);
- b) a hub (1) surrounding the rotational body and comprising a circumferential inner surface which together with the circumferential outer surface forms a joint between the rotational body and the hub which is inclined with respect to a rotational axis of the rotational body in longitudinal sections of the shrinkage disc unit, wherein the hub can be shrunk onto the rotational body along the joint or is shrunk on over the joint;

c) a fluid channel (7) leading through the rotational body or the hub, for charging the joint with a pressurized fluid;

d) and a fixing structure (Examiner considers the outer face of hub (1) to be the fixing structure) which is formed by one of the rotational body and the hub, alone or in combination with the other, and by means of which a tool is capable of being axially supported either on the rotational body or the hub and fixed in a predetermined rotational angular position on the rotational body and/or the hub, for assembling and/or disassembling the hub

e) wherein the rotational body and/or the hub is or are configured such that it is only possible to press a pressurized fluid into the joint when the tool is properly mounted (Examiner considers the functional limitation to be met since the fluid cannot enter the joint unless the ports (6 and 8) are aligned; Fig 1).

As to Claim 2, as best understood MILLER ET AL disclose the shrinkage disc unit according to claim 1, wherein the joint is conical at least in segments (Fig 1).

As to Claim 3, as best understood MILLER ET AL disclose the shrinkage disc unit according to claim 1, wherein a supporting collar is formed on either the rotational body or the hub, in order to support the tool in a positive lock (Examiner considers the shoulder portion, adjacent the protrusion 4 to be a supporting collar on the hub).

As to Claim 4, as best understood MILLER ET AL disclose the shrinkage disc unit according to claim 1, wherein a positioning element formed as a cavity (Examiner considers the cavity which houses the seals 16 to be the positioning element) or protrusion on either the rotational body or the hub, capable of positioning a positioning element of the tool, formed as a protrusion or cavity, in order to position the tool at an exact rotational angle.

Examiner notes that by choosing to define an element functionally, applicant assumes a risk, that risk being that where the Patent and Trademark Office has reason to believe that a functional limitation asserted to be critical for establishing novelty in the claimed subject matter may, in fact, be an inherent characteristic of the prior art, it possesses the authority to require the applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied upon. In the present case, applicant has provided no evidence to prove that the connector of White lacks or is incapable of achieving the functionally defined limitations (releasing the cable from the post upon impact) set forth in the claims.

As to Claim 5, as best understood MILLER ET AL disclose the shrinkage disc unit according to claim 4, wherein the positioning element is arranged near to a port of the fluid channel of the shrinkage disc unit (Fig 1).

As to Claim 6, as best understood MILLER ET AL disclose a tool (3) for assembling and/or disassembling the shrinkage disc unit according to claim 1, said tool comprising:

a) a fixing structure (Examiner considers the inner face of tool (3) to be the fixing structure) for positioning the tool on the rotational body or the hub at an exact rotational angle and axially supporting the tool on one of the rotational body and the hub (Fig 1);

b) a pressure element (16) or tensile element, supported by the fixing structure such that it can be moved, by means of which, when a fixing part is axially supported on one of the rotational body and the hub, the other of the rotational body and the hub can be charged with an axial force (When the pressure element (16) is in place, the pressure forces the hub elements apart with an axial force);

c1) and a fluid channel (10) formed in the tool and, when the tool is fixed, capable of being connected to the fluid channel (7) of the shrinkage disc unit, such that the joint can be charged with the pressurized fluid through the fluid channel of the tool (Fig 1).

As to Claim 7, as best understood MILLER ET AL disclose a combination of the shrinkage disc unit according to claim 1 and the tool, axially supported on the shrinkage disc unit and positioned at an exact rotational angle, according to claim 6 (Fig 1).

As to Claim 8, as best understood MILLER ET AL disclose a shrinkage disc unit including a separate tool, comprising:

a) a conical circumferential outer surface formed by a rotational body (2);

b) a hub having a conical circumferential inner surface which is pushed onto the circumferential outer surface (1);

c) a tool for assembling and/or disassembling the shrinkage disc unit which is not a part of the shrinkage disc unit (3);

wherein:

d) the tool is only connected to one of the rotational body and the hub in a non-positive and/or positive lock for assembling and/or disassembling the shrinkage disc unit (Fig 1);

e) the joint between the conical circumferential outer surface and the conical circumferential inner surface is charged with a pressurized fluid (via 10,7) for assembling and disassembling the shrinkage disc unit, wherein this can only be achieved when the tool is properly fastened to said one of the rotational body and the hub (Examiner considers the functional limitation to be met since the fluid cannot enter the joint unless the ports (6 and 8) are aligned; Fig 1).

As to Claim 9, as best understood MILLER ET AL disclose the shrinkage disc unit according to claim 1, wherein the tool comprises one or more protruding (4) or retracted portions which engage with a corresponding number of portions of one of the rotational body and the hub, substantially congruent with respect to the portion or portions of the tool, when fastening the tool, wherein the configuration and arrangement of the portions only allows the tool to be fastened such that the tool and the shrinkage disc unit are guaranteed to function properly (Fig 1).

As to Claim 10, as best understood MILLER ET AL disclose the shrinkage disc unit according to claim 1, wherein the tool is forced to be properly fastened to one of the rotational body and the hub by the configuration of the tool and said one of the rotational body and the hub (Fig 1).

As to Claim 12, as best understood MILLER ET AL disclose the shrinkage disc unit according to claim 1, wherein the tool is connected to one of the rotational body and the hub in a positive lock via at least one groove at least partially encircling an outer surface of said one of the rotational body and the hub and at least one portion of the tool engaging the at least one groove in a positive lock (Fig 1).

As to Claim 13, as best understood MILLER ET AL disclose the shrinkage disc unit according to claim 1, wherein the tool is connected to said one of the rotational body and the hub in a frictional lock by surface contact (via 16).

As to Claim 14, as best understood MILLER ET AL disclose the shrinkage disc unit according to claim 1, wherein:

a) the joint is charged with pressurized fluid via a supply conduit (7) which is integrated into one of the rotational body and the hub and via a supply conduit which is integrated into the tool (10);

b) and wherein there is a connection between the supply conduits when the tool is properly fastened to said one of the rotational body and the hub (Fig 1).

As to Claim 32, as best understood MILLER ET AL disclose the shrinkage disc unit according to claim 1, wherein when the shrinkage disc unit is assembled, the hub is secured against axially shifting along the centre axis of the rotational body in a positive lock on the rotational body via a number of securing elements, wherein the securing elements are secured in their position on one of the rotational body and the hub in a non-positive lock or/and a positive lock (Examiner considers the shoulders on the rotational body (2) to be the securing elements).

As to Claim 33, as best understood MILLER ET AL disclose the shrinkage disc unit according to claim 1, wherein the rotational body is prevented from axially shifting along the centre axis of the shaft by the configuration of the tensioning sleeve and the shaft (via the shoulders on the rotational body (2)).

As to Claim 37, as best understood MILLER ET AL disclose the shrinkage disc unit according to claim 1, wherein the circumferential outer surface and the circumferential inner surface comprise a number of congruent portions (Fig 1).

As to Claim 38, as best understood MILLER ET AL disclose the shrinkage disc unit according to claim 1, wherein the joint is circumferentially conical (Fig 1).

As to Claim 39, as best understood MILLER ET AL disclose the shrinkage disc unit according to claim 5, wherein the positioning element is arranged in a rotational angular

position relative to the rotational axis which is 30° at most away from the port of the fluid channel (Fig 1).

As to Claim 40, as best understood MILLER ET AL disclose the shrinkage disc unit according to claim 8, wherein the rotational body is a tensioning sleeve (Fig 1).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent documents 20040195837, 5188478, 6231262, 5947626, 5672026, 5476337, 5156480, 5149220, 4925415, 3033597, 4425050 and 3772759 have all been cited to show similar assembly units.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSHUA T. KENNEDY whose telephone number is (571)272-8297. The examiner can normally be reached on M-F: 7am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joshua T. Kennedy/
Examiner, Art Unit 3679
7/29/2009